## Exercise 12.4

**Question 4:**

A rectangular plot is given for constructing a house, having a measurement of 40 m long and 15 m in the front. According to the laws, a minimum of 3 m, wide space should be left in the front and back each and 2 m wide space on each of other sides. Find the largest area where house can be constructed.

**Answer 4:**

Let ABCD is a rectangular plot having a measurement of 40m long and 15m front.

∴ Length of inner-rectangle, EF = 40 – 3 – 3 = 34 m

And breadth of inner – rectangle, FG =15 – 2 – 2 = 11m

∴ Another rectangle EFGH will be formed inside the rectangle ABCD

∴ Area of inner rectangle, EFGH

= Length × Breadth [∵ *Area of* rectangle = length × breadth]

= EF × FG

=34 ×11

= 374 $m^2$

Hence, the largest area where the house can be constructed in 374 $m^2$